

## PATENT ABSTRACTS OF JAPAN

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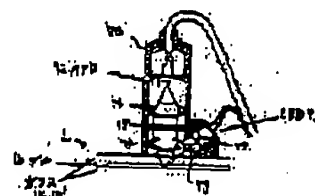
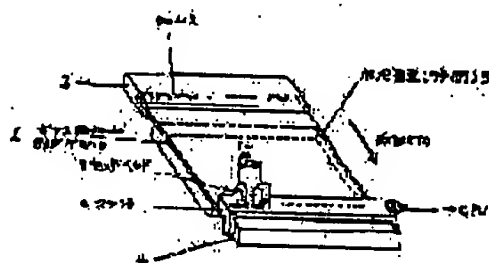
## (54) DECIDING APPARATUS FOR BASE SEQUENCE

(57)Abstract:

**PURPOSE:** To exclude the scanning function of an optical system, to eliminate a need for the complicated adjustment of an optical axis and to increase an S/N ratio and a coefficient of light utilization by a method wherein a light source which shines excitation light a fluorescence-labeled DNA fragment and a detector which receives generated fluorescence, are integrated and they are arranged in every electrophoretic lane.

**CONSTITUTION:** A gel electrophoretic plate 1 is formed in such a way that, e.g. a 6-% polyacrylamide gel 1b in a thickness of 0.35mm is sandwiched between Pyrex glass plates 1a, 1b in a thickness of 0.5mm, and a fluorescence-labeled DNA fragment is injected into a recessed part in a well 2. Consequently, the recessed part in the well 2 having a width of 5 to 10mm is extended in the length direction of the electrophoretic plate 1, and it is used as an electrophoretic lane. Both ends of the electrophoretic plate 1 are inserted into buffer-solution tanks 3, 4 to which one pair of electrodes are attached, and they are connected to a high-voltage power supply. One piece each of a sensor head 7 is arranged in every electrophoretic lane at a

mount part 6, excitation light from an LED is cast on the gel 1b, fluorescence from the DNA fragment is received by an avalanche photodiode (APD) 71, and a base arrangement is decided by a CPU.



## LEGAL STATUS

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